

## NEXEDGE®

# NXR-700E/800E

NEXEDGE® VHF/UHF Digital & Analog Base Units

## NXDN®

### ● GENERAL FEATURES

- 146-174 MHz
- 400-430, 440-470 MHz
- 5-25 W Output (100% Duty Cycle)
- Repeater Operation
- Duplex/Simplex Base Operation
- 30 CH Scanning Base (Conventional)
- Two-Digit LED Display
- LED Status Indicators
- 6 Programmable Function Keys
- 0.3 W Front Panel Speaker
- 3 W External Speaker Audio
- Volume Control
- Program/Modem Interface
- Remote Termination Interface
- Programmable AUX I/O's
- DTMF Front Panel PF Key Control
- DTMF AUX Output Control
- DTMF AUX Input Monitoring
- KPG-109D Windows® FPU
- Flash Firmware Upgrading

### ● DIGITAL – GENERAL

- NXDN® Digital Air Interface
- AMBE+2™ VOCODER
- 6.25 & 12.5 kHz Channels
- UID & GID Validation
- NXR Over-the-Air Alias
- KXK-3 OCOXO Option
- NXDN® Scrambler Included
- Telephone Interconnect Option

### ● DIGITAL – CONVENTIONAL MODE

- 16 RAN Repeater Controller Built-in
- 1,000 GIDs Per Site
- 1,000 UIDs Per Site
- Mixed FM/Digital Operation
- Conventional IP Networks
- Site Roaming Capability

### ● DIGITAL TRUNKING OPTION

- 3,000 GIDs Per Site
- 3,000 UIDs Per Site
- 30 Channels Per Site
- Transmission Trunked Mode
- Message Trunked Mode
- Busy Call Queuing
- Call Queue Pre-emption
- Late Entry (UID & GID)
- Control Channel Rotation
- Control / Traffic Channel Switching
- Cross-Busy
- Fail Soft Mode
- NXDN® & LTR® Traffic Channel Sharing
- 2MB Call/Activity Memory
- Compact Flash Memory Expansion
- ESN Validation

### ● MULTI-SITE IP NETWORK OPTION

- Upto 16/48 Site Configurations
- 60,000 GIDs Per Network
- 60,000 UIDs Per Network
- NEXEDGE® Trunked Features
- Ethernet Network Interface
- IP LAN/WAN Connectivity
- Auto-Roaming
- Registration & De-Registration
- Wide Area All Group Call
- Secure VPN Connections
- Group Registration
- Use of Off-the-Shelf 10 Base-T/100 Base-TX Ethernet Switching & Routers

### ● KPG-110SM SYSTEM MANAGER

- Trunked Sites & IP Network Systems Only
- Windows® 2000/XP/Vista®/7 Compatible
- USB Secure Key Access
- Direct, Dial-Up & IP Connectivity
- Subscriber Privileging
- 127 UID/GID Class Of Service Entries
- 5,000 Fleets (UID/GID User Lists)
- Group Call Inter-Site Limits
- Remote Site Programming
- Real-Time Activity Monitoring
- NXR/Network Interface Diagnostics
- Call Logging / Event Download
- Remote System Firmware Updates

### ● ANALOG MODES – GENERAL

- 25\* & 12.5 kHz Channels
- Encryption/ANI Board Control

### ● ANALOG CONVENTIONAL MODE

- 16 QT/DQT Repeater Control Built-in
- Hang Timer / Time Out Timer / CW ID
- External FM Controller Interface

### ● ANALOG LTR® TRUNKED MODE

- External LTR® Controller Interface
- External MPT Controller Interface



## Options

■ **KXK-3**  
OCXO Unit  
(Required for  
6.25 kHz operation)



■ **KMC-9C**  
Desktop Microphone



■ **KTI-4M**  
Telephone Interconnect  
Adapter (Requires telephone patch)



■ **KMC-35**  
Microphone



■ **KES-5**  
External Speaker



## Main Specifications

All accessories and options may not be available in all markets.  
Contact an authorized Kenwood dealer for details and complete list of all accessories and options.

		NXR-700E	NXR-800E
GENERAL			
Frequency Range	E E3	146-174 MHz -	440-470 MHz 400-430 MHz
Channel Spacing	Analog Digital	12.5 / 15 / 25* / 30* kHz 6.25 / 12.5 kHz	12.5 / 25* kHz 6.25 / 12.5 kHz
PLL Channel Step		2.5 / 3.125 / 5 / 6.25 kHz	3.125 / 5 / 6.25 kHz
Frequency Stability	With KXK-3 (for 6.25 kHz)	± 1.5 ppm ± 0.5 ppm	
Operating Voltage		13.8 V DC ± 15%	
Operating Temperature Range		-22° F to + 140° F (-30° C to +60° C)	
Antenna Impedance		50 Ω	
Dimensions (W x H x D)	Projections not included	19.02 x 1.73 x 13.03 in (483 x 44 x 331 mm)	
Weight (net)		11 lb (5 kg)	
FCC ID	E E3	K44371310 -	K44371410 K44371412
IC Certification	E E3	282F-371310 -	282F-371410 282F-371412
RECEIVER			
Sensitivity	Digital @ 6.25kHz (3% BER) Digital @ 12.5kHz (3% BER) Analog (12 dB SINAD)	0.27 μV 0.33 μV 0.30 μV	
Selectivity	Analog @ 25/30 kHz Analog @ 12.5 kHz	93 dB (± 30 kHz) 85 dB (± 12.5 kHz)	87 dB (± 25 kHz) 81 dB (± 12.5 kHz)
FM Hum & Noise	Analog @ 25/30 kHz Analog @ 12.5 kHz	60 dB 55 dB	
Intermodulation Distortion		85 dB (± 50 / 100 kHz)	
Spurious Response		100 dB	
Audio Distortion (Ext. SP)		Less than 2% (at 0.3W)	
Audio Output (Ext. SP)		3 W (at 4 Ω, less than 5% distortion)	
TRANSMITTER			
RF Power Output		25 W to 5 W	
Spurious & Harmonics		73 dB	
FM Hum & Noise	Analog @ 25/30 kHz Analog @ 12.5 kHz	55 dB 50 dB	
Audio Distortion		Less than 1% at 1000 Hz	
Modulation		16K0F3E*, 11K0F3E, 8K30F1E, 8K30F1D, 8K30F7W, 4K00F1E, 4K00F1D, 4K00F7W, 4K00F2D	

Analog measurements made per TIA/EIA 603 and specifications shown are typical.  
Specifications are subject to change without notice, due to advancements in technology.

\* 25 kHz is not for sale in the USA and the US territories.

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